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Search for the electron antineutrinos from the Sun at KamLAND

OLEG PEREVOZCHIKOV, University of Tennessee, KAMLAND COLLABORATION — KamLAND is 1kton liquid scintillator detector located deep underground in Japan. It was build to study antineutrinos produced by nuclear plants, but it can also detect antineutrinos from other sources. Chain of thermonuclear reactions on Sun is a huge source of electron neutrinos. Detection of electron antineutrinos from Sun, which are not directly produced there, could indicate the existence of the mechanism of conversion electron neutrinos to electron antineutrinos under influence of strong magnetic field in the core of the Sun. Update of the first KamLAND result on search of such mechanism will be presented.

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